In The Claims:

This listing of the claims will replace all prior versions and listings of the claims in the application:

Please amend claims 22-27.

Please cancel claims 21 and 28.

1. – 21. (canceled)

22. (currently amended) ||An apparatus|| A combination as set forth in claim [[21]] 29 wherein the spray module and the wafer jig are constructed and arranged to [[the]] be movable with respect to each other.

23. (currently amended) [[An apparatus]] A combination as set forth in claim [[21]] 29 further comprising wafer jig holding machine constructed and arranged for oscillating reciprocally the wafer jig in at least a vertical direction with respect to the spray module.

24. (currently amended) [[An apparatus]] A combination as set forth in claim [[21]] 29 further comprising an actuated robot connected to the wafer jig for moving the wafer jig in a vertical direction with respect to the nozzles.

25. (currently amended) [[An apparatus]] A combination as set forth in claim [[21]] 29 wherein the spray module includes a plurality of spray nozzles each constructed and arranged to spray wetting solution particles having a diameter ranging from 10-100 micrometers.

26. (currently amended) [[An apparatus]] A combination as set forth in claim [[21]] 29 wherein the spray module includes three spray nozzles arranged in a triangular shape.

27. (currently amended) [[An apparatus]] A combination as set forth in claim [[21]] 29 constructed and arranged to spray the wetting solution at a rate of 1.5 kg per cc.

28. (canceled)

29. (previously presented) A combination comprising:

an apparatus for pretreating a semiconductor wafer prior to electroplating and a semiconductor;

the apparatus comprising a wafer jig constructed and arranged to carry the semiconductor wafer therein, and wherein the wafer jig includes an opening therein for exposing a top surface of the semiconductor wafer, a wetting solution supply tank connected to a pump, and the pump connected to a spray module for pumping wetting solution through a spray module and onto a semiconductor wafer carried in the wafer jig, and wherein the spray module includes a plurality of spray nozzles each constructed and arranged to spray wetting solution particles having a

diameter less than 100 micrometers so that the entire top surface of the wafer is covered by the wetting solution and so that the top surface of the wafer covered by the wetting solution may be subsequently electroplated;

the semiconductor wafer comprising a contact pad, and an under bump metallurgy overlying the contact pad, and a photoresist layer overlying the under bump metallurgy, and wherein the photoresist layer has an opening therein down to the under bump metallurgy and aligned with the contact pad and wherein the opening has a diameter less than 100 micrometers and so that the entire top surface of the wafer including the under bump metallurgy is covered by the wetting solution and so that the top surface of the wafer covered by the wetting solution may be subsequently electroplated.

30. (previously presented) A combination as set forth in claim 29 wherein the apparatus is constructed and arranged to spray the wetting solution particles having a diameter ranging from 10-100 micrometers.

31. (previously presented) A combination comprising:

an apparatus for pretreating a semiconductor wafer prior to electroplating and a semiconductor;

the apparatus comprising a wafer jig constructed and arranged to carry the semiconductor wafer therein, and wherein the wafer jig includes an opening therein for exposing a top surface of the semiconductor wafer, a wetting solution supply tank connected to a pump, and the pump connected to a spray module for pumping wetting solution through a spray module and onto a semiconductor wafer carried in the wafer jig, and wherein the spray module includes a plurality of spray nozzles each constructed and arranged to spray wetting solution particles having a diameter less than 100 micrometers;

the semiconductor wafer comprising a contact pad, and an under bump metallurgy overlying the contact pad, and a photoresist layer overlying the under bump metallurgy, and a seed layer overlying the photoresist layer and the under bump metallurgy and wherein the photoresist layer has an opening therein down to the under bump metallurgy and aligned with the contact pad and wherein the opening has a diameter less than 100 micrometers and so that the entire top surface of the wafer including the seed layer is covered by the wetting solution and so that the top surface of the wafer covered by the wetting solution may be subsequently electroplated.